



OIL ANALYSIS REPORT

| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
PETERBILT 846-4044
Component
Diesel Engine
Fluid
MOBIL DELVAC ELITE 15W40 (--- Shots)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | RPL0020371 | RPL0017358 | RPL0015544 |
| Sample Date | | Client Info | | 26 Apr 2024 | 29 Dec 2023 | 29 Sep 2023 |
| Machine Age | mls | Client Info | | 410882 | 401622 | 399355 |
| Oil Age | mls | Client Info | | 9260 | 23935 | 21669 |
| Filter Age | mls | Client Info | | 9260 | 23935 | 21669 |
| Oil Changed | | Client Info | | Filtered | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Changed | Not Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >110 | 19 | 29 | 29 |
| Chromium | ppm | ASTM D5185m | >4 | <1 | 1 | 1 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | <1 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 4 | 5 | 4 |
| Lead | ppm | ASTM D5185m | >45 | 2 | 7 | 5 |
| Copper | ppm | ASTM D5185m | >85 | 1 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >4 | <1 | 1 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

There is no indication of any contamination in the oil.

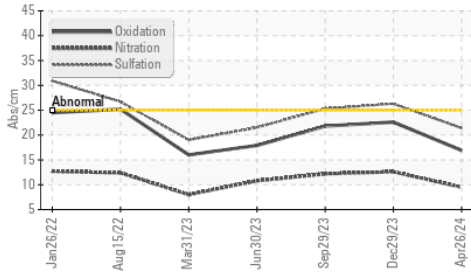
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >30 | 6 | 5 | 5 |
| Potassium | ppm | ASTM D5185m | >20 | 6 | 1 | 5 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.6 | 1.1 | 1 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.5 | 12.6 | 12.2 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.4 | 26.3 | 25.3 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

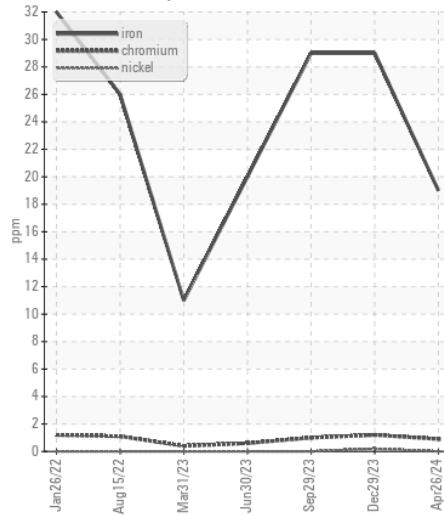
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 2 | 0 | 2 |
| Boron | ppm | ASTM D5185m | | 3 | 12 | 15 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 66 | 69 | 67 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 1010 | 954 | 855 |
| Calcium | ppm | ASTM D5185m | | 1209 | 1249 | 1238 |
| Phosphorus | ppm | ASTM D5185m | | 1262 | 1014 | 903 |
| Zinc | ppm | ASTM D5185m | | 1333 | 1302 | 1108 |
| Sulfur | ppm | ASTM D5185m | | 3680 | 2844 | 2474 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.9 | 22.6 | 21.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.7 | 8.9 | 6.1 | 6.7 |
| Visc @ 100°C | cSt | ASTM D445 | 15.2 | 13.5 | 14.4 | 14.3 |

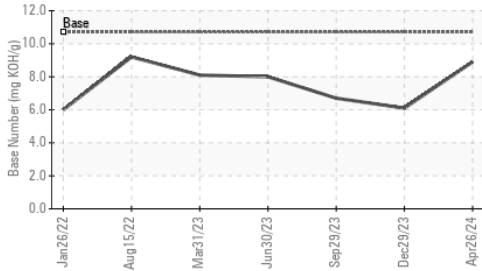
FT-IR (Direct Trend)



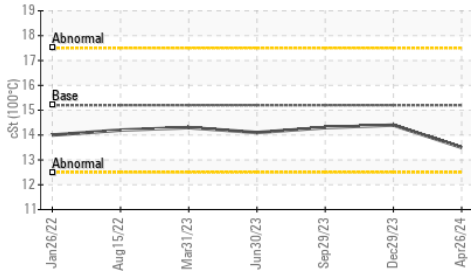
Ferrous Alloys



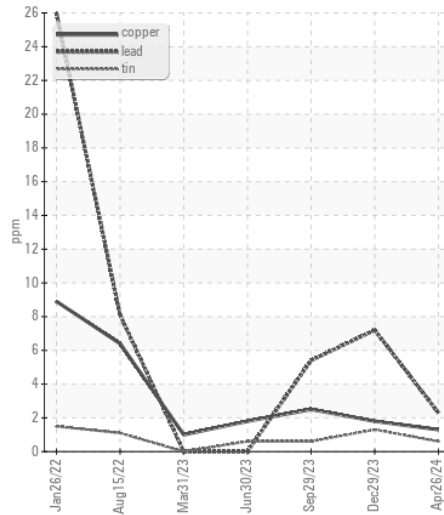
Base Number



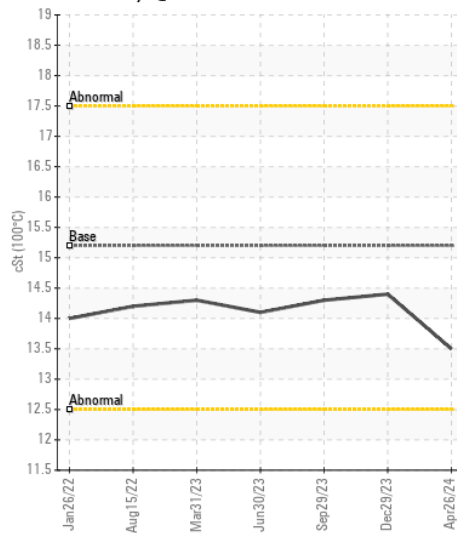
Viscosity @ 100°C



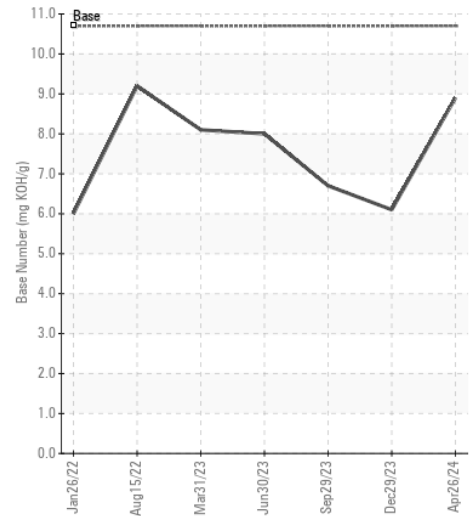
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0020371
Lab Number : 06185858
Unique Number : 11042610
Test Package : FLEET

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 23 May 2024 - Jonathan Hester

RTL PACLEASE - 7006 - Pico Rivera
 7837 Telegraph Rd
 Pico Rivera, CA
 US 90660
 Contact: GERARDO CARROLA
 carrolag@rushenterprises.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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F: